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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--|-------------|----------------------|-------------------------|------------------|--|
| 10/025,190   | 12/19/2001  | James L. Baggot      | KCX-277 (12716)         | 6432             |  |
| 7590 01/21/2004  |             |                      | EXAMINER                |                  |  |
| Christina L. Mangelsen                                 |             |                      | HUG, ERIC J             |                  |  |
| Dority & Manning, Attorneys at Law, P.A. P.O. Box 1449 |             |                      | ART UNIT                | PAPER NUMBER     |  |
| Greenville, SC 29602                                   |             |                      | 1731                    | <del>"</del> .   |  |
|  |             |                      | DATE MAILED: 01/21/2004 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| . Office Action Summary   |  | Apı                           | olication No.      | Applicant(s)  |  |  |  |  |
|---|--|-------------------------------|--------------------|---|--|--|--|--|
|   |  | 10                            | /025,190           | BAGGOT ET AL.   |  |  |  |  |
|   |  | Exa                           | ıminer             | Art Unit  |  |  |  |  |
|   |  |                               | Hug                | 1731  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |                               |                    |   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status   |  |                               |                    |   |  |  |  |  |
| 1)  | Responsive to communication(s) file  | ed on <u>25 Se<i>pter</i></u> | <u>mber 2003</u> . |   |  |  |  |  |
| 2a) <u></u>   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |                               |                    |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |                               |                    |   |  |  |  |  |
| Dispositi   | ion of Claims  |                               |                    |   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-29 and 31-68</u> is/are pending in the application.   |  |                               |                    |   |  |  |  |  |
| 4a) Of the above claim(s) <u>1-20 and 32-46</u> is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☑ Claim(s) <u>21-29,31 and 47-68</u> is/are rejected.  7) □ Claim(s) is/are objected to.  |  |                               |                    |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |  |                               |                    |   |  |  |  |  |
|   | ion Papers   |                               |                    |   |  |  |  |  |
| <ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.</li> <li>Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</li> <li>Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>   |  |                               |                    |   |  |  |  |  |
| Priority u  | ınder 35 U.S.C. §§ 119 and 120   |                               |                    |   |  |  |  |  |
| 12)   Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)   All b)   Some * c)   None of:  1.   Certified copies of the priority documents have been received.  2.   Certified copies of the priority documents have been received in Application No  3.   Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13)   Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a)   The translation of the foreign language provisional application has been received.  14)   Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. |  |                               |                    |   |  |  |  |  |
| Attachmen   |  |                               |                    |   |  |  |  |  |
| 2) Notic  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F mation Disclosure Statement(s) (PTO-1449) F |                               |                    | ummary (PTO-413) Paper No(s)<br>formal Patent Application (PTO-152) |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 21-26, 28, 47, 49, 53-57, 59, 64, and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Britt (US 2,890,540). Britt discloses a paper napkin formed from facial-type tissue and embossed between a hard steel patterned roll 22 and a softer resilient pressure (backing) roll 23. The napkin may be single ply or multi-ply (column 2, line 38). The rolls are run under pressure to impart a design onto the paper from the patterned roll. The pattern roll is also a heated roll (column 2, lines 49-54). The use of the resilient roll avoids cutting and tearing of the paper as compared to when two metal rolls are used. The paper has a basis weight that falls within the claimed basis weight range of conventional tissue (column 2, lines 65-72; claim 1). The temperature (150-400 deg F), pressure, running speed, and moisture content of the web are carefully controlled to provide the desired pattern. The resulting pattern is a consequence of interfiber bonding, whether one or more plies are used (column 6, lines 24-30).

With respect to the claims, a well-defined decorative pattern is formed extending to the center of the paper, such that the pattern clearly falls between 2-60% of the surface area of the web as shown by the figures. The pattern is embossed into the web by means of heat and pressure using a rigid pattern roll and a resilient backing roll. Fibers are bonded together at the embossed regions. The embossed sheet has a distinctive appearance characterized by regions of

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contrasting light reflectance, which is characteristic of the claimed glassine appearance (see column 3, line 22 to column 4, line 16).

#### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 2. Claims 27 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Britt (US 2,890,540) in view of Grupe (US 5,209,953). Britt (described above) discloses a paper napkin made of tissue paper which is embossed by pressure and heat between a hard steel patterned roll and a soft resilient backing roll. Britt does not expressly disclose the absorbency of the napkin. Since the paper in Britt is a tissue paper made from a similar type pulp as that of the claimed invention, it would be reasonable to expect that the tissue paper in Britt may be made to have the same absorbency as that of the present invention. One skilled in the art would recognize that the claimed range of 5-9 grams of water per gram of fiber is a conventional value for tissue absorbency, as exemplified by Grupe (see column 2, lines 18-49). Therefore, at the time of the invention, it would have been obvious to one skilled in the art to make the tissue of Britt to have a water absorbency that is typical of conventional tissue papers.
- 3. Claims 29 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Britt (US 2,890,540) in view of Cabell et al (US 6,458,447). Britt (described above) does not disclose a reticulated pattern, per se, but states that any pattern or figure may be used subject the same manner at which the pattern or figure is formed (column 6, lines 13-16). A reticulated pattern is

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well known to one skilled in the art of embossing tissue paper, as exemplified by Cabell for providing two-dimensional elasticity when the paper is stretched or deformed in one direction. Therefore, at the time of the invention, it would have been obvious to one skilled in the art to incorporate a reticulated pattern in the tissue of Britt to allow for stretch along all sheet dimensions and enable the sheet to maintain its shape when deformed.

4. Claims 31, 48, 50-52, 61-63, and 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Britt (US 2,890,540) in view of legal precedent.

Regarding claims 31, 50-52, 61, 66-68, Britt does not disclose a range of surface area coverage by the embossed pattern. Although the coverage is obviously significant, it is not readily apparent from the drawings how much coverage is provided. Nevertheless, as the choice of pattern is arbitrary, the surface area is also arbitrary depending on the type of pattern chosen and the degree of bonding that is required when two plies are embossed together. The claims are unpatentable in view of this and in view of the amount of coverage is considered a result effective variable for effecting the bonding of two plies. Therefore, the claims are unpatentable, because one skilled in the art would recognize the surface area coverage of the embossed design as being a result effective variable, see *In re Boesch*, 205 USPQ 215 (CCPA 1980) (the discovery of an optimum value of a known result effective variable without producing any new or unexpected results is within the skill of the routineer in the art).

Regarding claims 48, 62, and 63, Britt does not specifically disclose a nip pressure, but Britt makes it clear that the nip pressure is an important variable for embossing a pattern having the desired characteristics. Therefore, the claims are unpatentable, because the choice of nip

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pressure (pli) would be recognized by one skilled in the art as being a result effective variable, see *In re Boesch*, 205 USPQ 215 (CCPA 1980) (the discovery of an optimum value of a known result effective variable without producing any new or unexpected results is within the skill of the routineer in the art).

### Response to Arguments

With respect to Applicant's arguments, the structure of the embossed paper of the present invention is clearly distinguished from that of papers produced in the applied prior art references set forth in the previous office action. As demonstrated by Applicant in the remarks and photos of Appendices A and B, a rigid pattern roll and resilient backing roll surface operated at sufficient temperature and pressure provides fiber bonding and a distinct pattern that differentiates the paper of the present invention from prior art papers embossed by other techniques such as steel-to-steel rolls or steel-to-rubber rolls without the application of heat.

Accordingly, all claims rejections set forth previously have been withdrawn.

# Drawings

New drawings are required in this application because the submitted informal drawings are not of sufficient quality for publication. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

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## Inventorship

The request for the deletion of inventors in this nonprovisional application under 37 CFR 1.48(b) is acknowledged.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0651.

ieh

PETER CHIN PRIMARY EXAMINER